

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-32. (Canceled)

33. (Currently Amended) A method of inducing or enhancing a cytotoxic T cell response against β hCG comprising:

forming contacting antigen presenting cells (APCs) either in vivo or ex vivo with a composition containing a conjugate of β hCG and a monoclonal antibody which binds to the human macrophage mannose receptor (MMR), wherein the composition does not include an adjuvant or immunostimulatory agent, ; and contacting the conjugate either in vivo or ex vivo with antigen presenting cells such that β hCG is internalized, processed and presented to T cells in a manner which induces or enhances a cytotoxic T cell response mediated by both $CD4^+$ and $CD8^+$ T cells against β hCG.

34. (Previously Presented) The method of claim 33, which further induces or enhances a helper T cell response against β hCG.

35. (Previously Presented) The method of claim 33, wherein β hCG presenting cells are dendritic cells.

36. (Previously Presented) The method of claim 33, wherein the T cell response is induced through both MHC Class I and MHC Class II pathways.

37-38. (Canceled)

39. (Original) The method of claim 33, wherein the antibody is selected from the group consisting of human, humanized and chimeric antibodies.

40. **(Original)** The method of claim 33, wherein the antibody is selected from the group consisting of a whole antibody, an Fab fragment and a single chain antibody.

41. **(Currently Amended)** The method of claim 33, wherein the antibody comprises a heavy chain variable region comprising FR1, CDR1, FR2, CDR2, FR3, CDR3 and FR4 sequences and a light chain variable region comprising FR1, CDR1, FR2, CDR2, FR3, CDR3 and FR4 sequences, wherein:

- (a) the heavy chain variable region CDR3 sequence comprises SEQ ID NO: 15; and
- (b) the light chain variable region CDR3 sequence comprises SEQ ID NO: 18;
- (c) the heavy chain variable region CDR2 sequence comprises SEQ ID NO: 14;
- (d) the light chain variable region CDR2 sequence comprises SEQ ID NO: 17;
- (e) the heavy chain variable region CDR1 sequence comprises SEQ ID NO:13; and
- (f) the light chain variable region CDR1 sequence comprises SEQ ID NO: 16.

42-43. **(Canceled)**

44. **(Previously Presented)** The method of claim 41, wherein the antibody comprises heavy chain and light chain variable regions comprising the amino acid sequences shown in SEQ ID NO:4 and SEQ ID NO:8, respectively.

45-47. **(Canceled)**

48. **(Original)** The method of claim 33, wherein the conjugate is administered *in vivo* to a subject.

49. **(Previously Presented)** The method of claim 48, wherein the subject is immunized against β hCG.

50. **(Currently Amended)** A method of inducing or enhancing a T cell-mediated immune response against β hCG, comprising contacting antigen presenting cells (APCs) with a composition containing a molecular conjugate of ~~comprising~~ a monoclonal antibody that binds

to the human macrophage mannose receptor (MMR) linked to β hCG, ~~with antigen-presenting cells wherein the composition does not include an adjuvant or immunostimulatory agent~~, such that β hCG is processed and presented to T cells in a manner which induces or enhances a T cell-mediated response mediated by both $CD4^+$ and $CD8^+$ T cells against β hCG.

51. **(Previously Presented)** The method of claim 50, wherein the T cell response is mediated by cytotoxic T cells and/or helper T cells.

52. **(Previously Presented)** The method of claim 50, wherein the T cell response is induced by cross-presentation of β hCG to T cells through both MHC Class I and MHC Class II pathways.

53-54. **(Canceled)**

55. **(Previously Presented)** The method of claim 50, wherein the molecular conjugate is contacted with the dendritic cells *in vivo*.

56. **(Previously Presented)** The method of claim 50, wherein the molecular conjugate is contacted with the dendritic cells *ex vivo*.

57-58. **(Canceled)**

59. **(Currently Amended)** A method of immunizing a subject comprising administering a composition containing a molecular conjugate of comprising a monoclonal antibody that binds to the human macrophage mannose receptor (MMR) linked to β hCG, wherein the composition does not include an adjuvant or immunostimulatory agent ~~in combination with an adjuvant and a cytokine which stimulates proliferation of dendritic cells or an immunostimulatory agent~~, such that the molecular conjugate induces or enhances a cytotoxic T cell response mediated by both $CD4^+$ and $CD8^+$ T cells against β hCG.